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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,806	03/10/2004	David A. Johnson	J-MVHL.1001	7101

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EXAMINER
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LIEU, JULIE BICHNGOC

ART UNIT	PAPER NUMBER
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2636

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/798,806

Applicant(s)

JOHNSON, DAVID A.

Examiner

Julie Lieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. This Office action is in response to Applicant's amendment filed December 13, 2005.

Claims 1, 6, and 10-11 have been amended.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable by Pedersen et al. (US Patent No. 5,832,187) in view of Johnson (US Patent No. 5,160,842).

#### **Claim 11:**

Pedersen discloses a method comprising:

- a. From an airborne platform, gathering solely from sensors on the airborne platform, for visual presentation and viewing purposes, related optical and thermal fire-perimeter data, (see abstract)
- b. Also from an airborne platform, gathering critical-alignment evaluation data solely from sensors on the airborne platform which is associated with and relevant to such different-region optical and thermal data, and
  - a. Transmitting all of such data, effectively in geophysically-linked manner, to a remote site for map-display viewing and evaluation.

Pedersen fails to disclose data including fire-line isothermal data and common time based visual overlay. However, ground fire gathering method including gathering fire-line isothermal data is old in the art as taught by Johnson. In light of this teaching, one skilled in the art would have readily recognized using fire-line isothermal data because it would be useful in determining the location of the fire as taught in Johnson. Johnson also suggests the use of visual overlay map. Thus, it would have been obvious to a skilled artisan to display the collected data in Pedersen overlay a map so that location the data can easily be seen on the display and the location of the fire would easily be determined.

Claim 12:

Pedersen et al.'s method applies to such gathered data selected critical-alignment, severity scale parameters which are employable generally to rank, from lower to higher, fire severity conditions in terms of prioritizing the deployment of fire-fighting resources, and from, and on the basis of, said applying, effectively map-highlighting, also for viewing and evaluation, selected parts of the gathered data which indicate certain higher-severity fire conditions. See col. 7, last paragraph.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pedersen et al. (US Patent No. 5,832,187) in view of Brogi (US Patent No. 5,734,335).

Claim 1:

Pedersen et al. discloses an airborne method for mapping and remotely reporting thermal and critical alignment evaluation data regarding the perimeter of a ground fire comprising:

- a. From an airborne platform 30, 40 which is deployed above, vertically remote from, and in selectable visual proximity to at least a portion of the perimeter line of a ground fire, gathering, along a substantially common line of sight, for remote transmission, linked thermal and optical imagery data interpretable for picturing positionally-defined thermal information relating to a selected region on and along such a perimeter-line portion, (see abstract)
- b. Substantially simultaneously, and in relation to gathering with respect to such a selected region, and from the spatial region immediately adjacent the airborne platform, additionally acquiring related critical-alignment, fire-information evaluation data including wind speed and wind direction solely from airborne sensors where data is spatially independent from ground-based data, and
- c. Transmitting such thermal, optical and critical-alignment evaluation data to, and for reception and interpretation at, a remote site.

Pedersen fails to disclose using fire information evaluation data including temperature and relative humidity. However, Pedersen suggests in col. 16, lines 46-65 that important weather conditions are to be collected and transmitted to monitoring station. Also, the use of such information as an aid in determining the anticipated path of the fire is old in the art as taught in Brogi. In light of this teaching, it would have been obvious to one skilled in the art to use the concept taught in Brogi in the system of Johnson's because it would provide useful information.

Pedersen also fails to disclose data including fire-line isothermal data and common time based visual overlay. However, ground fire gathering method including gathering fire-line isothermal data is old in the art as taught by Johnson. In light of this teaching, one skilled in the

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art would have readily recognized using fire-line isothermal data because it would be useful in determining the location of the fire as taught in Johnson. Johnson also suggests the use of visual overlay map. Thus, it would have been obvious to a skilled artisan to display the collected data in Pedersen overlay a map so that location the data can easily be seen on the display and the location of the fire would easily be determined.

Claim 2:

The method in Pedersen further includes, with respect to such a selected perimeter-line region, noting, relative to the platform, the associated angular disposition in space of the associated substantially common line of sight along which such optical and thermal data for that region is gathered; that is, the coordinate locations of the fire. See abstract.

Claim 3:

Pedersen et al.'s method further comprises enabling the optical and thermal imagery data gathering to take place selectively along an infinitely different number of selectable, spatially-oriented, substantially common lines of sight.

Claim 4:

Pedersen discloses effectively linking, relative to a selected perimeter-line region, the linear distance along the associated, substantially common line of sight between the selected region and the airborne platform.

Claim 5:

In Pedersen et al.'s system, GPS information is effective to define the then associated position in space, relative to one another, of the selected region and the airborne platform.

Claim 6:

The rejection of claim 6 recites the rejection of claim 1, except it is an apparatus claim. It is inherent that the apparatus are included in the Johnson and Brogi system to perform the method disclosed. Also see col. 2, line 64 to col. 3, line 68.

Claim 8:

The rejection of claim 8 recites the rejection of claim 5, except it is an apparatus claim, which apparatus are included in the combined system.

Claim 9:

The rejection of claim 9 recites the rejection of claim 2.

Claim 10:

Pedersen discloses n airborne system for mapping and remotely reporting critical alignment evaluation data regarding the perimeter of a ground fire comprising

- b. An airborne platform 30, 40 deployable and movable above and over a ground fire coordinated optical and thermal imaging structure mounted on said platform, characterized effectively with a spatially angularly adjustable, substantially common, optical and thermal view axis, and operable to create a coordinated and remotely communicatable flow of linked optical and thermal imagery data solely from sensors on the airborne platform which in interpretable for picture the temperature level-differentiated perimetral outline of the at least a portion of such a ground fire, and
- c. Critical alignment data-gathering structure operatively associated with the imaging structure, also mounted on the support platform, and operable to produce, in relation to such a first mention data flow a like, remotely communicable, companion data

flow containing related critical alignment evaluation data solely from sensors on the airborne platform including information regarding wind speed and direction.

The reference fails to disclose using fire information evaluation data including temperature and relative humidity. However, Pedersen suggests in col. 16, lines 46-65 that important weather conditions are to be collected and transmitted to monitoring station. Also, the use of such information as an aid in determining the anticipated path of the fire is old in the art as taught in Brogi. In light of this teaching, it would have been obvious to one skilled in the art to use the concept taught in Brogi in the system of Johnson's because it would provide useful information.

Perdersen fails to disclose data including fire-line isothermal data and common time based visual overlay. However, ground fire gathering method including gathering fire-line isothermal data is old in the art as taught by Johnson. In light of this teaching, one skilled in the art would have readily recognized using fire-line isothermal data because it would be useful in determining the location of the fire as taught in Johnson. Johnson also suggests the use of visual overlay map. Thus, it would have been obvious to a skilled artisan to display the collected data in Perdersen overlay a map so that location the data can easily be seen on the display and the location of the fire would easily be determined.

### ***Remarks***

5. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.



*Conclusion*

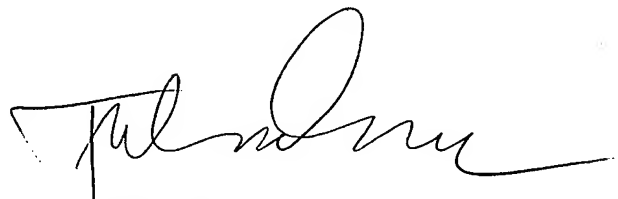
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Julie Lieu  
Primary Examiner  
Art Unit 2636